## In memory of Prof. Yutaka Kuru



He passed away on March 11, 2001, at the age of 72.

Time goes by so quickly. July 13, 2001 is the first "Obon" memorial day at which we remember him. In Japan, the souls of persons who have died are believed to come back to visit their families from July 13 to July 15, and the custom of paying respect to our ancestors at this time is called "Obon". Professor Yutaka Kuru peacefully started on his journey to the Western Paradise on March 11, 2001, after fighting his illness for about 10 months in a special suite on the 14th floor of Juntendo Hospital. He died at the age of 72. We can assume that he was greatly comforted by the devoted nursing he received from his wife Kazuko and his 2 sons.

Professor Yutaka Kuru was born on December 27, 1928. The professor was the first son in his family, and had one younger brother and one younger sister. One of his ancestors came from a temple in Ise, Mie prefecture. His grandfather operated a hospital in Matsuzaka after studying medical science in Germany. His father, a doctor, took over the hospital in Matsuzaka, but died in his thirties. Professor Kuru was only a child when his father died. He was very interested in philosophy, but at his mother's urging he decided to study medical science. He graduated from the Medical College of Kanazawa Medical University in March 1950. After working as a physician in the Internal

Medicine Department of Matsuzaka Municipal Hospital from August 1950 to January 1952, he entered Department of Surgery I, School of Medicine, Kanazawa University in October 1952 as a postgraduate student, and in March 1959 he received his medical doctorate from Kanazawa University. In October 1960, he entered Department of Radiology, Osaka University Faculty of Medicine, as a research student, and in June 1961 he became an assistant for Department of Radiology, Wakayama Medical College. He was appointed an assistant in Osaka University Faculty of Medicine in January 1962, and in October 1962 he was also appointed deputy head physician in the Radiology Department, Kihoku Annex Hospital, Wakayama Medical College. He made an official visit to Karolinska Institutet in Sweden for 6 months from May 1965, during which period he presented a paper on the "anterior cerebral meningeal artery" which branches from the ophthalmic artery. He was appointed as a lecturer in Osaka University Faculty of Medicine in October 1968, and as part-time associate professor at Juntendo University in June 1972. He became a professor at Juntendo University in January 1973. In March 1995, having reached retirement age, he retired from Juntendo University, and in April 1995 he became a professor emeritus.

In 1968, Shozo Ishii, present chairman of the board of directors of Juntendo University, re-



"Hand drawing from Professor Kuru on the cranial nerves at the Skull Base (1982; courtesy of P.L)"

signed from his position as a professor in the Neurosurgery Department, University Chicago, and became the first professor in the new Neurosurgery Department at Juntendo University. At that time, angiography, the X-ray contrast study of subarachnoid spaces of the brain and spinal cord and of cerebral vessels, was carried out using various contrast media to locate pathological foci for the purpose of diagnosis. Pneumo-Chairs and continuous cerebral angiography systems were installed in a limited number of facilities in Japan, Europe and America, and improved the accuracy of these diagnostic methods, but such modern systems were not installed in Juntendo Hospital at that time.

In 1972, Professor Kuru, then a associate professor in Osaka University Faculty of Medicine, was invited to Juntendo University for special lectures. He made it clear that detailed interpretation of the findings of continuous cerebral angiography can determine the anatomical location of specific parts of the brain, and that diagnosis can be made by locating the focus of disease through an understanding of the displacement of these particular parts. It is said that at that time, neurosurgeons and neurologists were enraptured by Professor Kuru's expertise in theoretical development, following it with breathless interest. In the following year, 1973, Professor Kuru was appointed as a professor in the Department of Radiology at Juntendo University. Together with Professor Shozo Ishii in neurosurgery and Professor Hirotaro Narabayashi in neurology, Professor Kuru showed that in neurosurgery and neurology, clinical medicine is greatly dependent on neuroradiological diagnosis, and that neuroradiology is an essential interdisciplinary territory in these fields.

Professor Kuru's radiological anatomy provided extensive coverage of the areas of otorhinolaryngology, ophthalmology, orthopedics, and psychiatry, etc. In Japan, he became Secretary of the Japan Neuroradiology Research Group (which later became an academic society), and contributed greatly to the development of neuroradiology in Japan. As a result, many clinical physicians, both in and outside of Juntendo University, studied under Professor Kuru. Many of them, as professors or heads of facilities in their respective fields, are now giving guidance to a younger generation of physi-

cians. Since the introduction of CT and MRI, the localization of the focus of disease has now become easier, because these systems provide a concrete understanding of the relationship between the location of the focus of disease and the findings of peripheral anatomy. Before the introduction of these high-technology items of equipment, however, it was very difficult to actually locate the focus of disease by correlation with the local anatomy of the brain, and to do accurate diagnosis.

Professor Kuru held lengthy discussions in radiation disease case study meetings concerning the locations of the foci of disease, and in his explanations he overlapped the locations of the foci of disease obtained from angiography and cerebral angiography findings, with anatomical diagrams of the foci of disease. Related to this, the anatomical diagrams he drew of the locations of disease foci are very fine and detailed; before he died, Professor Kuru gave some of those drawings to his favorite students as mementos.

Professor Kuru was a brilliantly talented man and learned many languages including French, Spanish, Portuguese, English, German, and Swedish; the rich scholarship supporting his neuroanatomy was also in turn supported by matters mentioned in the classic works of Charcot, Brocca and Brodmann, etc. As a hobby, he enjoyed playing the game "Go". He was also very fond of delicious food. In addition, Professor Kuru was extremely sensitive to the latest trends, particularly angio anatomy and in 1983 he invited Pierre Lasjaunias of Paris, to a Japan Neuroradiology Research Group meeting. Dr. Lasjaunias had mastered neuroanatomy during his medical studies, and when he visited Japan at the youthful age of 32, he was already well known to Professor Kuru through his many publications.

Professor Kuru contributed greatly, not only to Juntendo University and to Japan, but also to the world, as a neuroanatomist and doctor of clinical radiology.

As one of his students, I'd like to express my sincere gratitude to Professor Kuru. May his soul rest in peace!

2001 Summer Department of radiology Juntendo University Yuo IIZUKA